# Focus...

# Barriers to Prenatal Care in Missouri

Infant mortality and its leading cause, low birth weight, are serious public health problems in the United States. Research has shown that women who receive adequate prenatal care during their pregnancies have much lower rates of low birth weight infants than do women who receive less than adequate prenatal care. In Missouri, inadequate prenatal care[1] has been identified as a significant factor for women whose babies die in the neonatal period[2], which is mostly associated with low birth weight.

As with infant mortality and low birth weight which remain much higher among nonwhites than among whites, there are racial disparities which exist in prenatal care utilization rates. The inadequate prenatal care rate in Missouri (1987) was 16.5 percent, but was 13.4 percent for whites and 31.0 percent for nonwhites.

Because of the association between prenatal care and positive pregnancy outcome, there has been a great deal of interest in identifying the barriers to prenatal care, in order to eliminate them and enable all women to obtain early and continuous prenatal care services. A study co-sponsored by the Missouri Perinatal Association and the Missouri Department of Health was undertaken to identify both the barriers and inducements to receiving early and continuous prenatal care services.

The study was conducted in Kansas City, St. Louis and Southeast Missouri, as these have been identified as the areas with the highest rates of infant mortality and inadequate prenatal care in Missouri. Face-to-face interviews were conducted with postpartum mothers prior to discharge in 11 hospitals. Interviewers determined whether women had adequate or inadequate care based on the prenatal record or from the patient herself, and conducted interviews with women who received inadequate prenatal care and an equal number of adequate-care mothers. Interviews began in June, 1987 and were completed in Kansas City and St. Louis in September, 1987. Because of the smaller number of births, interviews in Southeast Missouri were completed in June, 1988.

In the urban areas, the study was conducted primarily in large, public hospitals which serve primarily low-income and minority women. Because of this, the two groups of women (those who received adequate or inadequate care) were drawn from approximately the same population. In Southeast Missouri although the hospitals served both "public" and "private" patients, the two groups were comparable in their representation of adequacy of care.

After matching the questionnaires with birth certificates, there were a total of 1,484 women, 764 (51.5 percent) of whom had inadequate prenatal care. Table 1 illustrates the adequate and inadequate prenatal care populations by selected characteristics. As expected, the two groups were differentiated by race, age, marital status, education, gravidity and income. The inadequate prenatal care group had a higher percentage of black, teenage, unmarried, less educated, high parity and low income (less than $5,000/year) women than did the adequate care group. The inadequate care group had more Medicaid participants (55.4 percent) and Food Stamp participants (41.0 percent) than the adequate care group (Medicaid: 40.3 percent, Food Stamps: 33.1 percent). On the other hand, the adequate care group had a higher rate of WIC participants (74.9 percent) than the inadequate care group (65.6 percent). The inadequate care group had higher rates of women with no previous source of health care (60.2 percent) than the adequate care group (50.6 percent) but had lower rates of women who worked outside the home (35.8 percent) than the adequate care group (47.2 percent). These were both direct and proxy variables for poverty which emerged as a major factor in differentiating between the two groups.

Wantedness of pregnancy was examined by a series of questions illustrated in Table 2. When asked how they felt when they found out they were pregnant, over half (54.2 percent) of those with adequate care said they were happy, while only 32.1 percent of those who received inadequate care said they were happy. The remaining wantedness of pregnancy variables each differentiated the inadequate and adequate care groups. The inadequate care group had much higher rates of women who didn't want to be pregnant, or want others to know of the pregnancy or who considered adoption or abortion than the adequate care group.

Table 3 illustrates other problems commonly thought to affect prenatal care utilization. The inadequate group reported more problems with transportation, childcare problems and financial problems affecting their ability to pay for care or find prenatal care providers than the adequate care group. Women from the inadequate care group were twice as likely (18.7 percent) to report having too many other problems to go for care than those in the adequate group (7.8 percent) A sizable number of women from the adequate care group (17.5 percent) and the inadequate group (22.0 percent) reported that they just didn't feel like going sometimes.

The inadequate care group reported that they experienced "a lot" of stress during pregnancy a third more often (38.6 percent) than the adequate care group (29.0 percent). Table 3 also reveals the mediating influence of social support on prenatal care utilization, as women in the adequate care group had higher rates of social support than those in the inadequate care group.

---

1. Inadequate prenatal care is defined both by late entry into care (after four months of pregnancy) as well as by number of total visits (less than five visits for pregnancies less than 37 weeks, or less than eight visits for 37+ week pregnancies).

2. Pierson, V.H. (1987): Perinatal and Postneonatal Mortality and Low Birth Weight in Missouri. Missouri Center for Health Statistics Publication No. 4.33.

Table 1

Percent Distributions of Adequate Prenatal Care and Inadequate Prenatal Care Populations by Selected Characteristics

| | *Adequate Prenatal Care Group* | | *Inadequate Prenatal Care Group* | |
|---|---|---|---|---|
| | *Number* | *Percent* | *Number* | *Percent* |
| Black, Non-Hispanic | 342 | 47.9 | 432 | 56.7 |
| Age under 20 at Delivery | 196 | 27.2 | 267 | 35.0 |
| Unmarried at Pregnancy Onset | 446 | 61.9 | 574 | 75.1 |
| Less than High School Education | 282 | 39.2 | 410 | 53.7 |
| Number of Prior Pregnancies: | | | | |
| 0 | 262 | 36.4 | 217 | 28.4 |
| 1-3 | 397 | 55.1 | 438 | 57.3 |
| 4 or More | 61 | 8.5 | 109 | 14.3 |
| Income (Yearly): | | | | |
| Less than $5,000 | 200 | 27.8 | 295 | 38.6 |
| $5,000 - 9,999 | 187 | 26.0 | 171 | 22.4 |
| $10,000 - 14,999 | 100 | 13.9 | 82 | 10.7 |
| $15,000 and over | 117 | 16.3 | 82 | 10.7 |
| Unknown | 116 | 16.1 | 134 | 17.5 |
| Medicaid Participant | 290 | 40.3 | 423 | 55.4 |
| Food Stamp Participant | 238 | 33.1 | 313 | 41.0 |
| WIC Participant | 539 | 74.9 | 501 | 65.6 |
| No Previous Regular Source of Health Care | 363 | 50.6 | 459 | 60.2 |
| Worked Outside the Home During Pregnancy | 339 | 47.2 | 272 | 35.8 |
| Perceived Prenatal Care Very Necessary | 649 | 90.4 | 553 | 73.0 |
| Health Problems During Pregnancy | 279 | 39.0 | 220 | 29.0 |
| Total* | 720 | 100.0 | 764 | 100.0 |

*Includes unknowns.

Table 2

Percent Distributions of Adequate Prenatal Care and Inadequate Prenatal Care Populations by Wantedness of Pregnancy Variables

| | *Adequate Prenatal Care Group* | | *Inadequate Prenatal Care Group* | |
|---|---|---|---|---|
| | *Number* | *Percent* | *Number* | *Percent* |
| Unplanned Pregnancy | 516 | 71.9 | 646 | 84.9 |
| Felt Happy When Learned of Pregnancy | 389 | 54.2 | 244 | 32.1 |
| Didn't Want Others to Know of Pregnancy | 84 | 11.7 | 177 | 23.2 |
| Didn't Want to Think About Being Pregnant | 126 | 17.5 | 231 | 30.2 |
| Didn't Know She Was Pregnant | 22 | 3.1 | 148 | 19.4 |
| Afraid to Tell Parents of Pregnancy | 107 | 14.9 | 171 | 22.4 |
| Afraid to Tell Baby's Father of Pregnancy | 39 | 5.4 | 64 | 8.4 |
| Wasn't Sure She Wanted to Be Pregnant | 236 | 32.8 | 346 | 45.3 |
| Embarrassed About Being Pregnant | 41 | 5.7 | 71 | 9.3 |
| Considered Adoption | 24 | 3.3 | 56 | 7.3 |
| Considered Abortion | 85 | 11.8 | 141 | 18.5 |
| Total* | 720 | 100.0 | 764 | 100.0 |

*Includes unknowns.

Table 3

**Percent Distribution of Adequate Prenatal Care and Inadequate Prenatal Care Populations for Selected Problems, Stress, and Support During Pregnancy**

| | *Adequate Prenatal Care Group* | | *Inadequate Prenatal Care Group* | |
|---|---|---|---|---|
| | *Number* | *Percent* | *Number* | *Percent* |
| Transportation Problems | 142 | 19.7 | 243 | 31.8 |
| Childcare Problems | 36 | 5.0 | 78 | 10.2 |
| Too Many Other Problems to Go for Care | 56 | 7.8 | 143 | 18.7 |
| Just Didn't Feel Like Going Sometimes | 126 | 17.5 | 168 | 22.0 |
| Afraid of Medical Procedures/Doctors | 23 | 3.2 | 44 | 5.8 |
| Couldn't Get an Appointment Earlier | 20 | 2.8 | 49 | 6.4 |
| Over One-Hour Wait to See Doctor | 180 | 25.1 | 212 | 30.6 |
| Couldn't See What I Gained from Care | 7 | 1.0 | 26 | 3.4 |
| Financial Problems Regarding Care: | | | | |
| Didn't Have Enough Money for Care | 316 | 43.9 | 387 | 50.6 |
| No Insurance Until Later in Pregnancy | 83 | 11.5 | 120 | 15.7 |
| Didn't Know Where to Go for Low-Cost Care | 58 | 8.1 | 114 | 14.9 |
| Couldn't Find Doctor Who Accepted Medicaid | 3 | 0.4 | 18 | 2.4 |
| Turned Away Because Couldn't Make Payment up Front | 9 | 1.2 | 37 | 4.8 |
| They Hassled Me About Money | 6 | 0.8 | 18 | 2.4 |
| Experienced "A lot" of Stress During Pregnancy | 208 | 29.0 | 293 | 38.6 |
| Excellent Help/Support from Baby's Father | 291 | 40.5 | 234 | 30.9 |
| Excellent Help/Support from Others | 285 | 39.6 | 252 | 33.2 |
| Total* | 720 | 100.0 | 764 | 100.0 |

*Includes unknowns.

Among the factors which were examined but which had no relation to the adequacy of care were satisfaction with care, length of wait to get an appointment, stressful life events pertaining to living conditions, problems with partner or family, problems with a job, and death or illness of family members or close friends. Prenatal care in the previous pregnancy did not have any relation to adequacy of care for this pregnancy. Neither did concern about the baby's health, about the woman's own health or about factors such as school enrollment or problems with the Medicaid application process.

One of the main barriers to prenatal care is poverty, as revealed by the high percentage of Medicaid and Food Stamp participants in the inadequate prenatal care group. Medicaid-eligibility by itself will not guarantee adequate prenatal care. The additional support and educational services offered by WIC may have fostered higher rates of adequate prenatal care. While transportation and childcare problems can be addressed by clinics within the existing system, issues pertaining to poverty and to wantedness of pregnancy must be addressed by society as a whole in order to improve the rate of adequate prenatal care utilization.


# MISSOURI MONTHLY VITAL STATISTICS

*Provisional Statistics*

FROM THE

MISSOURI DEPARTMENT OF HEALTH
STATE CENTER FOR HEALTH STATISTICS
Jefferson City, Missouri 65102-0570
(314) 751-6272

October 1988 VOL. 22 NO. 8